(b) whether it is a fact that India has increased its total wind energy capacity by 42 per cent;

(c) whether it is a fact that the wind power industry had demanded more concessions regarding equipments used for generation of wind power; and

(d) if so, the decisions taken in this regard?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI VILAS MUTTEMWAR): (a) The Electricity Act, 2003 attempts to deregulate the power sector in the country. Accordingly, license for setting up grid-interactive renewable power plants, including wind electric generators, is not required under this Act, subject to certain conditions. The underlying objective of deregulation is to eventually benefit the consumer of electricity.

(b) During 2004-05, 1111 MW of grid-interactive wind power capacity has been installed, which corresponds to around 31 per cent of the cumulative wind power installed capacity of 3595 MW, as on 31.3.05.

(c) and (d) Wind power receives numerous concessions in the form of fiscal incentives like 80 per cent accelerated depreciation, concessional custom and excise duties and preferential tariffs in most potential States. As a result, 13 per cent of the additional power generation installed capacity set up during the first 3 years, *i.e.*, 2002-03 to 2004-05 of the Tenth Plan has come from wind power alone against a target of 5 per cent. Accordingly, the target for wind power for this period has been exceeded by as much as 160 per cent. The progress in this sector is highly satisfactory.

Setting up hydrogen energy projects by foreign companies

3655. SHRI S.P.M. SYED KHAN: Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) whether Government have allowed foreign companies to set up hydrogen energy projects in India;

(b) if so, details thereof;

(c) the names of the hydrogen energy projects currently functioning in the country and projects proposed to be set up in future; and

(d) the role of hydrogen energy in the overall national energy security?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI VILAS MUTTEMWAR): (a) and (b) Foreign companies are permitted to set up 100 per cent owned subsidiaries or joint ventures, with Indian partners for financial and/or technical collaboration, in new and renewable energy, including hydrogen energy. Foreign companies can also set up new and renewable energy projects on Build-Own and Operate (BOO) basis.

(c) Hydrogen energy technology is in its nascent stage of development. At present, 23 Research and Development (R&D) projects are under implementation in different institutions across the country. However, in order to prepare a National Hydrogen Energy Road Map for the country and to oversee its implementation, the Ministry of Non-conventional Energy Sources has constituted a National Hydrogen Energy Board comprising representatives from Government, industry, academia, research institutions and experts. The R&D thrust areas are hydrogen production, transport, storage, delivery and its applications in systems/devices in transport, portable and stationary modes.

(d) The 3 competing alternate fuels are, namely, hydrogen, bio-fuels and synthetic fuels. These fuels are still in the development stage. The scientific and technical challenge is to make them and their applications in systems/devices for transport, portable and stationary modes commercially competitive. Alternate fuels, including hydrogen, are expected to play a dominant role sometime in the future.

Assessment of wind energy in Tamil Nadu

3656. SHRI S. ANBALAGAN: Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) whether the Union Government made any assessment of the potentiality of producing electricity by using wind energy in the State of Tamil Nadu; and

(b) if so, the details thereof and the follow up steps taken thereon including the areas of potentiality?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI VILAS MUTTEMWAR): (a) Yes, Sir.

(b) Forty one sites, which could be considered suitable for wind power projects have been identified in the State of Tamil Nadu, with a gross wind